

Environmental Protection Agency

§ 1037.104

optionally applied to certain other vehicles, as described in § 1037.104.

(ii) Tractors above 26,000 pounds GVWR.

(iii) All other vehicles subject to standards under this part. These other vehicles are referred to as “vocational” vehicles.

§ 1037.102 Exhaust emission standards for NO_x, HC, PM, and CO.

See 40 CFR part 86 for the exhaust emission standards for NO_x, HC, PM, and CO that apply for heavy-duty vehicles.

§ 1037.104 Exhaust emission standards for CO₂, CH₄, and N₂O for heavy-duty vehicles at or below 14,000 pounds GVWR.

This section applies for heavy-duty vehicles at or below 14,000 pounds GVWR. See paragraph (f) of this section and § 1037.150 of this section for provisions excluding certain vehicles from this section, and allowing other vehicles to be certified under this section.

(a) *Fleet-average CO₂ emission standards.* Fleet-average CO₂ emission standards apply for each manufacturer as follows:

(1) Calculate a work factor, WF, for each vehicle subconfiguration (or group of subconfigurations allowed under paragraph (a)(4) of this section),

rounded to the nearest pound, using the following equation:

$$WF = 0.75 \times (GVWR - \text{Curb Weight} + xwd) + 0.25 \times (GCWR - GVWR)$$

Where:

xwd = 500 pounds if the vehicle has four-wheel drive or all-wheel drive; xwd = 0 pounds for all other vehicles.

(2) Using the appropriate work factor, calculate a target value for each vehicle subconfiguration (or group of subconfigurations allowed under paragraph (a)(4) of this section) you produce using one of the following equations, rounding to the nearest 0.1 g/mile:

(i) For spark-ignition vehicles: CO₂ Target (g/mile) = 0.0440 × WF + 339

(ii) For compression-ignition vehicles and vehicles that operate without engines (such as electric vehicles and fuel cell vehicles): CO₂ Target (g/mile) = 0.0416 × WF + 320

(3) Calculate a production-weighted average of the target values and round it to the nearest 0.1 g/mile. This is your fleet-average standard. All vehicles subject to the standards of this section form a single averaging set. Use the following equation to calculate your fleet-average standard from the target value for each vehicle subconfiguration (Target_{*i*}) and U.S.-directed production volume of each vehicle subconfiguration for the given model year (Volume_{*i*}):

$$\text{Fleet-Average Standard} = \frac{\sum [\text{Target}_i \times \text{Volume}_i]}{\sum [\text{Volume}_i]}$$

(4) You may group subconfigurations within a configuration together for purposes of calculating your fleet-average standard as follows:

(i) You may group together subconfigurations that have the same equivalent test weight (ETW), GVWR, and GCWR. Calculate your work factor and target value assuming a curb weight equal to two times ETW minus GVWR.

(ii) You may group together other subconfigurations if you use the lowest

target value calculated for any of the subconfigurations.

(b) *Production and in-use CO₂ standards.* Each vehicle you produce that is subject to the standards of this section has an “in-use” CO₂ standard that is calculated from your test result and that applies for selective enforcement audits and in-use testing. This in-use CO₂ standard for each vehicle is equal to the applicable deteriorated emission level multiplied by 1.10 and rounded to the nearest 0.1 g/mile.